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Fig. 1

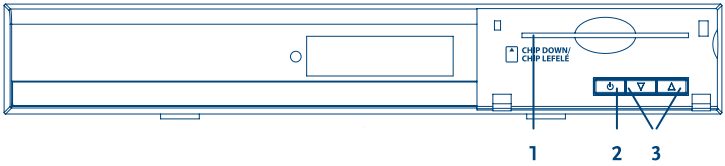

Fig. 2

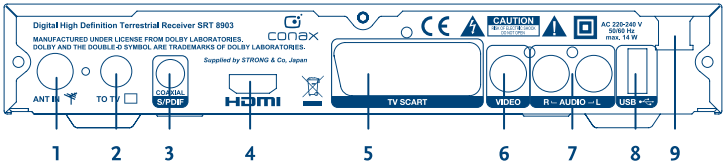

Fig. 3

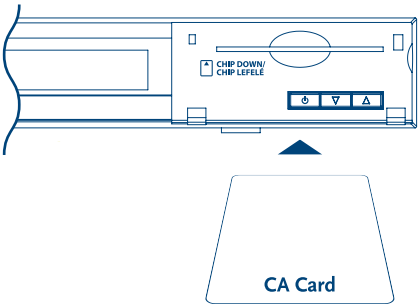

Fig. 4

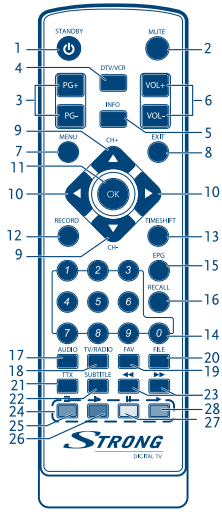

Fig. 5

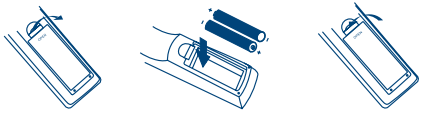

Fig. 6

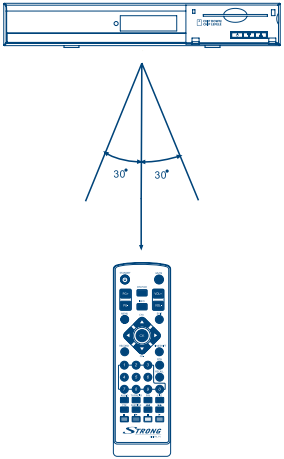
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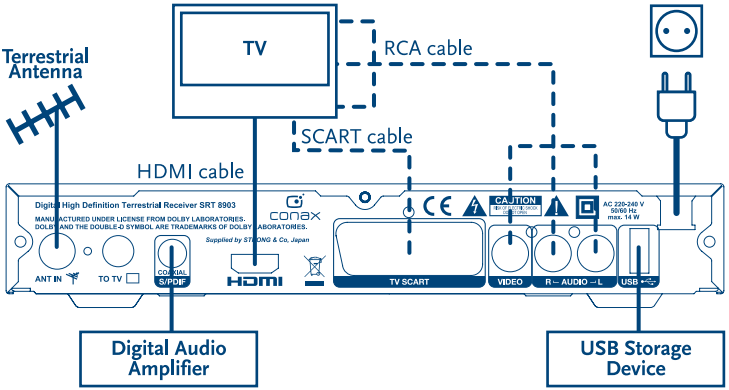
Fig. 7


Terrestrial Antenna
TV
RCA cable
SCART cable
HDMI cable
Digital High Definition Terrestrial Receiver SRT 8903
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50/60 Hz
max. 14 W
ANT IN
TO TV
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S/PDIF
HDMI
TV SCART
VIDEO
R — AUDIO — L
USB
Digital Audio Amplifier
USB Storage Device

STRONG
DIGITAL TV

TABLE OF CONTENTS

1.0 INSTRUCTION **2**
1.1 Safety Instructions 2
1.2 Storage 3
1.3 Equipment Set-up 4
1.4 Accessories 4
1.5 Usage of external USB devices 4
2.0 YOUR RECEIVER **5**
2.1 Default PIN code: 1234 5
2.2 Front panel 5
2.3 Rear Panel 5
2.4 CA Interface 5
2.5 Remote Control 6
2.6 Installing the Batteries 7
2.7 Using the Remote Control 7
3.0 CONNECTIONS **7**
3.1 Connecting to a terrestrial antenna 7
3.2 Connecting to HD TV with HDMI cable 7
3.3 Connecting to TV with SCART cable 7
3.4 Connecting to TV with cinch cable 7
3.5 Connecting to a digital audio amplifier with S/PDIF 8
3.6 Connecting to a digital audio amplifier and TV using HDMI 8
3.7 Connecting a USB storage device 8
4.0 STARTING UP FOR THE FIRST TIME **8**
5.0 QUICK GUIDE TO USING YOUR RECEIVER **9**
6.0 OPERATION **9**
6.1 Changing channels 9
6.2 Info Banner 10
6.3 Selection of audio language 10
6.4 Teletext 10
6.5 Subtitles 10
6.6 Timeshift 11
6.7 EPG (Electronic Programme Guide) 11
6.8 Instant Recording 11
7.0 MAIN MENU **11**
7.1 Edit Channel 11
7.2 Installation 14
7.3 System Setup 14
7.4 Tools 18
7.5 Games 19
7.6 Media+ 19
8.0 TROUBLESHOOTING **21**
9.0 TECHNICAL SPECIFICATIONS **22**

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23 Aug 2012 16:44

1.0 INSTRUCTION

1.1 Safety Instructions

This receiver has been manufactured to satisfy international safety standards. Please read the following recommended safety precautions carefully.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of not isolated dangerous voltage with the inside of the product that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and servicing instructions in the literature accompanying the appliance.

Read All Instructions — Before you use the product, read all operation instructions. For more information on accessories such as the lithium ion battery, refer to the manuals provided with those products.

Save These Instructions — Save all safety and operating instructions for future reference.

Heat Warnings — Read carefully and follow all warning labels on the product and those described in the instructions.

Follow Instructions — Follow all instructions provided with this product.

Cleaning — Always unplug this product from the wall outlet before cleaning. Use only a damp cloth for cleaning. Never use any type of liquid or aerosol cleaner, or any type of organic solvent to clean this product.

Attachments — For your safety, and to avoid damaging the product, use only accessories recommended by STRONG.

Water and Moisture — Never use this product around water (near a bathtub, kitchen sink, laundry tub, wet basement. swimming pool or in the rain)

Location — To avoid damage to the product and prevent personal injury, never place this product on an unstable stand, tripod, bracket, Follow the instructions that describe how to safely mount the product, and use only the mounting devices recommended by the manufacturer.

Power Sources — Connect this product only to the power source described on the product label. If you are not sure about the type of power supply in your home, consult your local power company. Refer to instruction pages for information on using the product with a battery.

Grounding, Polarization — If this product is used with a specified AC adapter, the adapter may be equipped with a polarized alternating current line plug (a plug with one blade wider than the other). This safety feature allows the plug to fit into the power outlet only one way. If you cannot insert the plug into the wall outlet, pull it out, reverse it, and have the receptacle replaced.

Ventilation — Slots and openings — They are provided for ventilation to ensure reliable operation of the receiver and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the receiver on a bed, sofa, rug, or heat register. This receiver should not be placed in a built-in installation such as a book case or rack, unless proper ventilation is provided. Ensure that free airflow is maintained around the receiver.

Protecting the Power Cord — The power supply cord should be placed so it will not be walked on. Never put a heavy object on the power cord or wrap it around the leg of a table or chair. Keep the area around the power cord connection points, at the power outlet, and at the product connection, free of all AC adapter or accessory power cords.

GENERAL PRECAUTIONS — SAFETY PRECAUTIONS

Lightning — If a lightning storm occurs while using a specified AC adapter, remove it from the wall outlet immediately. To avoid damage from unexpected power surges, always unplug the AC adapter from the power outlet and disconnect it from the receiver when the receiver is not in use.

Overloading — Never overload wall outlets, extension cords, power strips, or other power connection points with too many plugs.

Foreign Objects, Liquid Spillage — To avoid personal injury caused by fire or electrical shock from contact with internal high voltage points, never insert a metal object into the product. Avoid using the product where there is a danger of spillage.

Heat — Never use or store this product near any heat source such as a radiator heat register, stove, or any type of equipment or appliance that generates heat, including stereo amplifiers.

Servicing — Refer all servicing to qualified personnel. Attempting to remove the covers or disassemble the product, could expose you to dangerous high voltage points.

Damage Requiring Service — If you notice any of the conditions described below while using a specified AC adapter unplug it from the wall outlet and refer servicing to qualified service personnel:

1. Liquid has been spilled onto the product or some other object has fallen into the product.
2. The product has been exposed to water.
3. The product does not operate normally despite following operating instructions. Adjust only the controls described in the operating instructions as improper adjustment of other controls could damage the product and require extensive repair word by a qualified technician.
4. The product has been dropped or damaged in any way.
5. The product exhibits distinct change in performance.

Replacement Parts — When replacement parts are required, make sure that the authorized service centre uses only parts with the same characteristics as the originals, as recommended by the manufacturer. Unauthorized substitution of parts could result in fire, electrical shock, or create other hazards.

Safety Check — Upon completion of servicing or repairs, ask the service technician to perform safety checks to determine that the product is in good working order.

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on or next to the apparatus.

Where the mains plug or all-pole mains switch is used as the disconnect device, the disconnect device shall remain readily operable.

Remote control transmits a directional infrared beam. Ensure to aim the remote control directly at the infrared sensor of the unit during operation. If the sensor has been covered or there is a large object between the RCU and sensor or it is exposed to direct sunlight or a strong artificial light (fluorescent or strobe light) the sensor may not be able to receive the remote signal. In this case, change the direction of the light or reposition the unit.

1.2 Storage

Your receiver and its accessories are stored and delivered in a packaging designed to protect against electric shocks and moisture. When unpacking it, make sure that all the parts are included and keep the packaging away from children.

When transporting the receiver from one place to another or if you are returning it under warranty make sure to repack the receiver in its original packaging with its accessories. Failing to comply with such packaging procedures could void your warranty.

1.3 Equipment Set-up

We recommend you consult a professional installer to set up your equipment. Otherwise, please follow these instructions carefully:

- Refer to the user manual of your TV and your antenna.
- Make sure that the Audio/Video connectors and outdoor components of the antenna are in a good condition and the Audio/Video connections are well shielded.

This manual provides complete instructions for installing and using this receiver.
The following symbols will serve as follow.

WARNING:	Indicates a warning information.
NOTE:	Indicates any other additional important or helpful information.
MENU	Represents a button on the remote control
(Bold Characters) *Move to* *(Italic Characters)*	Represents a menu item within a window

1.4 Accessories

- 1 User Manual
- 1 Remote control unit
- 2x Batteries (AAA type)

NOTE: The batteries should not be recharged, disassembled, electrically short-circuited or be mixed or used with other types of batteries. If rechargeable accumulators instead of batteries are going to be used, we recommend using (e.g. NiMH) types with low self-discharge to ensure long time operation of remote control.

1.5 Usage of external USB devices

- It is recommended to use USB 2.0 storage devices. If your device is not compatible to USB 2.0 specifications, recording, playback and other multimedia functions of the receiver would not work properly.
- STRONG cannot guarantee compatibility to all types of USB storage devices.
- It is advised not to store important information on USB storage devices used with the receiver. Always make backups of data on your USB storage device before using it with this receiver. STRONG will not take responsibility for any loss of information or circumstances caused by loss of information.

Please ensure that either the USB device is already formatted to FAT/FAT32, or format the USB device via your receiver.

2.0 YOUR RECEIVER

2.1 Default PIN code: 1234

2.2 Front panel

Fig. 1

1.	**Smartcard reader**	Built in Conax smartcard reader for encrypted channels with Conax smartcard and valid subscription.* Insert smartcard with the chip side down.
2.	**Power button:**	Turn ON from standby, and turn OFF to standby mode
3.	**▲▼:**	Viewing mode: switch channel up/down. Menu mode: for navigation

*The Conax smartcard and subscription are not part of this set-top box.

2.3 Rear Panel

Fig. 2

1.	**ANT IN**	To connect an antenna for reception of broadcasting signal
2.	**TO TV**	To connect a TV set
3.	**SPDIF coaxial**	To connect to digital audio amplifier
4.	**HDMI**	To connect receiver to your TV set using an HDMI cable
5.	**TV SCART**	To connect receiver to your TV set using a SCART cable
6.	**VIDEO (RCA)**	To connect to the RCA video input of your TV or VCR using an RCA cable
7.	**AUDIO (L/R)**	To connect to the audio input of your HIFI or television
8.	**USB device**	To connect an external storage device
9.	**Power cable**	To connect the receiver to your main power supply

2.4 CA Interface

Although some TV and radio services are free-to-air, others are only available on a subscription basis and can only be received via a Conditional Access component.

Inserting a CA card

Fig. 3

It is suitable for Conax coding system.

1. Open the right-hand flap on the front panel of the product to access the card slot.
2. Insert the CA card into the slot. Insert the smartcard with the chip side down.

2.5 Remote Control

Fig. 4

1.	⏻	Turns the receiver On/Standby
2.	🔇	Mutes the audio output of the receiver
3.	**PG+/PG-**	Page up/down and 10 channels steps in the channel list mode
4.	**DTV/VCR**	No function
5.	**INFO**	Shows the current channel information
6.	**VOL+/VOL-**	Volume up/down
7.	**MENU**	Open and close the main menu; in a menu, you will go one step back.
8.	**EXIT**	Exits from the menu or sub-menu
9.	▲▼	Menu Off: Change channel to next /previous. Menu On: Moves the cursor up/down.
10.	◀▶	Menu Off: Decreases/increases the volume level. Menu On: Change settings for specific menus
11.	**OK**	Menu Off: Displays the current channel list Menu On: Activates the highlighted menu item.
12.	●	Records the TV programme to the connected storage device
13.	**TIMESHIFT**	Activates/deactivates the timeshift function
14.	**0~9**	Channel selection or value input
15.	**EPG**	Shows the EPG (Electronic Programme Guide) in TV mode
16.	**RECALL**	Back to the previously shown channel
17.	**AUDIO**	Select audio mode and audio track Sets the current audio channel to left, right or stereo with the L/R buttons
18.	**TV/RADIO**	Toggles between TV and RADIO mode
19.	**FAV**	Open the favourite list
20.	**FILE**	Shows the Media Player list
21.	**TTX**	Shows Teletext on the OSD (On Screen Display)
22.	**SUBTITLE**	Subtitle On/Off Shows list of subtitle languages
23.	◀◀/▶▶	Fast rewind/fast forward
24.	**Coloured buttons**	For interactive functions/submenu function buttons For Multimedia and Teletext functions
25.	■ **(Red)**	To stop recording and shortcut to the Record Manager
26.	▶❙ **Green)**	Slow motion button in timeshift or playback.
27.	❙❙ **(Yellow)**	To freeze the picture or to initiate timeshift when a USB device is connected.
28.	▶ **(Blue)**	To start play or replay after picture freeze or timeshift.

2.6 Installing the Batteries

Fig. 5

Remove the battery cover from the remote control and put 2x AAA size batteries inside the compartment. The diagram inside the battery compartment shows the correct way to install the batteries.

1. Open the cover 2. Install batteries 3. Close the cover

NOTE: The batteries should not be recharged, disassembled, electrically short-circuited, be mixed or used with other types of batteries.

2.7 Using the Remote Control

Fig. 6

To use the remote control, point it towards the front of the digital receiver. The remote control has a range of up to 7 metres from the receiver at an angle of up to 60 degrees. The remote control will not operate if its path is blocked.

NOTE: Sunlight or very bright light will decrease the sensitivity of the remote control.

3.0 CONNECTIONS

Fig. 7

3.1 Connecting to a terrestrial antenna

To receive a broadcast signal, your terrestrial indoor or outdoor antenna must be connected to the ANT IN connector on the back of the receiver. Use a properly shielded antenna cable and suitable connectors.

The TO TV connector allows you to loop the antenna signal to a second receiver or TV set. If your (indoor-) antenna needs a 5 V power source to operate, please select antenna power 'ON' in the antenna menu.

3.2 Connecting to HD TV with HDMI cable

The HD TV set shall be connected with the receiver with a good quality HDMI 1.3 or higher cable. This connection gives the highest possible quality.

3.3 Connecting to TV with SCART cable

The SRT 8903 is also equipped with a SCART connector; and so the TV set can alternatively be connected to the receiver with a good quality SCART cable. However, the full potential of HD broadcast quality can only be obtained when using an HDMI cable and an HD TV.

3.4 Connecting to TV with cinch cable

TV sets without SCART or HDMI input(s) can be connected to the receiver with suitable cinch cables. Connect one end of the cable to the Audio L, R and VIDEO connectors on the back of the SRT 8903. Connect the other end to the respective inputs on your TV set. This connection will give analogue picture quality.

3.5 Connecting to a digital audio amplifier with S/PDIF

By connecting your receiver to a digital amplifier or home theatre system, you can enjoy the best possible sound quality and multi-channel audio (depending on broadcast). Connect your digital audio amplifier or home theatre system with a suitable cinch cable to the S/PDIF connector on the back of the receiver. To hear multi-channel audio on your audio set, select 'Bitstream' for the digital audio output in the TV system menu.

3.6 Connecting to a digital audio amplifier and TV using HDMI

By connecting your receiver to the latest digital amplifiers or home theatre systems with HDMI connections, you will enjoy the best possible sound quality and multi-channel audio (depending on broadcast). Connect the HDMI output of the receiver to an input of your amplifier, and then connect the HDMI output of the amplifier to your TV set. Select the correct input on your amplifier to watch and listen to programmes. To hear multi-channel audio on your audio set, select 'Bitstream' for the digital audio output in the TV system menu.

3.7 Connecting a USB storage device

NOTE: We recommend the use of a hard disk drive USB 2.0 or higher for recording and playback of TV events.

For proper functioning of the timeshift and recording functions, a fast USB device (such as a hard disk drive) is needed. Interrupted playback or distorted pictures during playback or timeshift are indications for low device speed. STRONG cannot guarantee proper functioning of recoding and/or timeshift functions with all USB devices.

4.0 STARTING UP FOR THE FIRST TIME

If you have a Conax smartcard from your provider, please insert it into the CA slot on the right hand side of the receiver, behind the flap. Insert the card with the chip side down.
If you are using your receiver for the first time, the *Welcome* "Easy install" menu appears. Use ▲▼ to move the highlight to the setting you wish to alter and use ◀▶ to change values. Start by selecting your region using ◀▶. When you have selected your region, press ▼ to move the highlight to *Language*. Select your language using ◀▶.

Language	Select your language.
Region:	Select your region where this receiver is used.
Subtitle:	Select *Normal* to display subtitles per default, Select *Hard of Hearing* to show HoH subtitles per default. Select *Off* to hide subtitles per default.
Aspect Mode:	Use this option to select the aspect ratio of your TV and the preferred conversion method. Options are: *Auto* (automatic detection of aspect ratio), *4:3 Panscan* (Displays 16:9 widescreen broadcasts full screen on your 4:3 TV), *4:3 letterbox* (black bars on top and under the picture on a 4:3 TV) and *16:9* (use this setting for 16:9 TV sets).
Scan mode:	Select *All* to store scrambled and free to air channels or select *Free* to store only free to air channels. Note: you cannot watch scrambled channels with this receiver.
Connection:	Use this option to select the connection to your TV set. Select *HDMI* or *TV SCART*. If you are using a cinch cable this selection is not important.

When all settings have been made, move the highlight to *OK* and press **OK** to continue.

NOTE: Wrong region selection can lead to missing channels or channels being stored on wrong positions in the channel list.

The receiver will now advance to the *Aerial Adjustment* screen.
This part of the installation wizard is of great help when setting up your antenna system.
Use ▲▼ to move the highlight to the setting you wish to alter and use ◀▶ to change values. The following settings are available:

Antenna Power: Set to *On* if you use an active antenna. When set to *On*, 5 V will be present on the ANT IN connector of the receiver. Select *Off* for passive antennas.

Beeper: Select *On* for an audible indication of signal reception. *Off* turns the beeper off.

Channel No.: Select a channel that is known to carry a broadcast in your region. The *Signal Strength* and *Signal Quality* bars give a visual indication of the reception. Adjust your antenna to obtain maximum signal strength and quality.

When all settings have been made, press **OK** to start scanning.
The receiver will now search for all available channels. When the scanning is finished, the receiver switches to viewing mode.

TIP: If the *Welcome* "Easy install" menu does not appear after switching on the receiver the first time, reset the receiver to the factory settings by pressing the **MENU** button and selecting *Load Factory Setting* in the submenu *Tools*. (Default PIN 1234)

5.0 QUICK GUIDE TO USING YOUR RECEIVER

We at STRONG understand that you can't wait to enjoy your new high definition digital terrestrial receiver. The following quick guide will make you familiar with the basic operation of this device. We do, however, advice you to read the full manual to get the best performance from your receiver.
To turn your receiver ON or to standby, use the ⏻ button on the remote control.
Choose a channel with the ▲▼ buttons. You can also digit the channel number with the **0–9** buttons on the remote control or press **OK** in viewing mode to display the channel list. The volume can be adjusted with the ◀▶ buttons.
If you have a Conax smartcard from your provider, please insert it into the CA slot on the right hand side of the receiver, behind the flap. Insert the card with the chip side down.

6.0 OPERATION

Your new receiver is equipped with several features to make watching TV a true pleasure. This paragraph describes these features. Please also read chapter **7.0** to get familiar with the menu of your receiver.

6.1 Changing channels

Your new receiver is equipped with four ways to change channels.

- Via direct access using the **0–9** buttons.
- Via the channel list through the **OK** button.
- Via the **PG+** and **PG-** buttons.
- Via the ▲▼ + **OK** buttons.

6.1.1 Direct access via the 0~9 buttons

To gain direct access to a certain channel, simply input its number with the **0~9** buttons on the remote control. Channel numbers can be up to four digits long. Entering a number with less than four digits is possible. Just wait a few seconds and your receiver will switch to the selected channel or press **OK** immediately after selecting the channel number.

6.1.2 Channel list

Press **OK** in viewing mode to display the *Channel List*. Use ▲▼ in the Channel List to highlight your channel of choice and press **OK** once to select the highlighted channel. Press **OK** again to leave the Channel List.

TIP: Use ◀▶ to toggle between the *All Channel* list and favourite lists or press **FAV** for a list of available favourite lists.

6.1.3 Using the ▲▼ + OK or PG+/PG- keys

▲ + **OK** switches to the next channel.
▼ + **OK** switches to the previous channel.
PG+ switches to the next 10 channels.
PG- switches to the previous 10 channels.

6.2 Info Banner

While watching TV you can press the **INFO** button at any time to get information about the current channel and event*. Press **INFO** twice for extended EPG details about the current channel. Use the **YELLOW** button, to switch current/next event information. Press **INFO** three times for technical details about the current channel.

*Event information is displayed when available. Availability depends on broadcast.

6.3 Selection of audio language

Some channels support a choice of audio formats and/or languages. To select another audio stream, press **AUDIO** in viewing mode. A list with available audio streams will now be displayed. Use ▲▼ to select a stream and confirm with **OK**. The audio channel as stereo, mono, left and right can be selected with the ◀▶ buttons.

6.4 Teletext

Your receiver includes a fully featured Teletext. To access Teletext, press the **TTX** button in viewing mode and use the **0~9** buttons to input the number of the page you wish to see. The coloured buttons of the remote control allow you to jump to selected pages directly, as indicated on the bottom of the teletext screen. Use the ▲▼ buttons to select one page up or down, use the ◀▶ buttons to select subpages. Press **EXIT** or **TTX** again to get back to viewing mode.

6.5 Subtitles

Some channels support a choice of subtitle languages. Press **SUBTITLE** in viewing mode to display a list of available subtitle languages. Select your subtitle of choice with ▲▼ and press **OK** to confirm. Press **EXIT** to leave without making changes.

6.6 Timeshift

Timeshift allows you to pause live broadcasts and resume playback later. Press **TIMESHIFT** in viewing mode to activate this mode. The message *Timeshift On* appears on screen, live TV keeps playing. To pause press the ❚❚ button and press ▶ to resume time shifted playback. Press ◀◀/▶▶ for fast rewind/ fast forward. Press ■ to return to live TV.
Press **TIMESHIFT** to exit the Timeshift mode.

NOTE: Timeshift needs a connected USB storage device with sufficient free space and sufficient speed in order to work properly.

6.7 EPG (Electronic Programme Guide)

The Electronic Programme Guide is a very useful function that allows you to view event schedules and information and to book programmes for recording. To access the EPG, press the **EPG** button in viewing mode. Use ▲▼ to select a channel and ◀▶ to select an event. Press **OK** to display detailed information on the selected event. Use **EXIT** to quit the detailed information screen. Press **RED** to get to the Step Time function. Use ◀▶ to select the step of choice and **OK** to execute. Press **EXIT** to quit the Step Time function. Press **GREEN** to set a timer for a selected event. Refer to section **7.3.4** for details on the timer function.

NOTE: Availability of EPG data depends on broadcast.

6.8 Instant Recording

Your new receiver allows you to make an instant recording of the programme you are watching. Simply press ● to start the recording. To enter the duration for the recording, press ● again. Use the **0~9** keys to enter the recording time. Then press **OK**.
During the recording a recording sign will be shown on the upper left of your TV screen. To stop the recording, press ■. Select *Yes* and press **OK** again to stop the recording. The menu functions are disabled during recordings.
*Please connect a USB storage device with sufficient free space before you start a recording.

7.0 MAIN MENU

The main menu gives you access to settings, multimedia functions and built in games. To access the main menu, press **MENU** in viewing mode. The main menu consists of the following sub menus: *Edit Channel*, *Installation*, *System Setup*, *Tools*, *Game* and *Media+*.
Throughout the main menu, **MENU** or **EXIT** can be used to get back to the previous screen.

7.1 Edit Channel

Use ▲▼ to select *Edit Channel* and press **OK** or ▶ to enter.
Use ▲▼ to highlight a sub menu and press **OK** to select.
Press **EXIT** or ◀ to get back to the main menu.

7.1.1 TV Channel List

In the *Edit Channel* menu select *TV Channel List* with ▲▼ and press **OK** to enter.
Use ◀▶ to change the channel group (provided that you have already set up favourite groups).
Select a channel with ▲▼. Press **OK** to view the selected channel in the preview box.

7.1.1.1 Adding channels to favourite lists

Channels from the *TV Channel List* can be added to up to 8 different favourite groups. Press **FAV** in the *TV Channel List* to access this function. The *FAV* sign on the top of the screen moves up to indicate that the favourite function is selected. Use ▲▼ to select a channel you wish to add to a favourite group. When the channel of choice is highlighted, press **OK**. A list with all available favourite lists will now pop up. Use ▲▼ to select the favourite list you wish to add the channel to and press **OK**, then press **EXIT** to finalize the process. Favourite channels will be marked with a ♥ symbol. When all changes have been made, press **EXIT** twice. A confirmation banner pops up. Select *Yes* to save the changes or *No* to discard.

7.1.1.2 Locking channels

Locked channels can only be watched after entering the pin code. **(DEFAULT PIN: 1234)**
To lock or unlock a channel, press **RED** in the *TV Channel List*. The red *Lock* sign on the top of the screen moves up to indicate that the *Lock* function is selected. Use ▲▼ to select the channel of choice and press **OK** to lock or unlock it. You are asked to enter the pin code. **(DEFAULT PIN: 1234)**
Locked channel will be marked with the 🔒 symbol. Locking/unlocking multiple channels in one session is possible. When all changes have been made, press **EXIT** twice. A confirmation banner pops up. Select *Yes* to save the changes or *No* to discard. Locking/unlocking multiple channels in one session is possible.

7.1.1.3 Skipping channels

Channels marked with *Skip* will be skipped when zapping through channels with the ▲▼ buttons. However, these channels are still available from the channel list.
To mark channels for skipping, press **GREEN** in the *TV Channel List*. The ➥ symbol on the top of the screen moves up to indicate that the *Skip* function is selected. Use ▲▼ to select the channel of choice and press **OK** to mark or unmark it for skipping. Channels set for skipping will be marked with the ➥ symbol. When all changes have been made, press **EXIT** twice. A confirmation banner pops up. Select *Yes* to save the changes or *No* to discard.

7.1.1.4 Moving channels in the FAV list

Select the Favourite group in which you like to move your channel. To enable the move function, press **YELLOW** in the *TV Channel List – Fav group x*. The ⬍ symbol on the top of the screen moves up to indicate that the *Move* function is selected. Use ▲▼ to select the channel of choice and press **OK** to select it. You can now move the selected channel up or down the channel list using ▲▼. When the channel has been positioned as wished, press **OK** again. The channel is now fixed on its new position. When all changes have been made, press **EXIT** twice. A confirmation banner pops up. Select *Yes* to save the changes or *No* to discard.

7.1.1.5 Sorting channels in the FAV list

Select your favourite list in the *TV Channel list*. Press the ◀▶ buttons to switch to the FAV group, press the **RED** button to display sort options.

Sort

Press **RED** to enter the *Sort* menu.
Use ▲▼ to select sorting method and press **OK** to confirm.
Possible methods are:

Name (A-Z):	Sorting in alphabetical order from A to Z.
Name (Z-A):	Sorting in alphabetical order from Z to A.
Free/Scramble:	Free-To-Air channels will be first in the list.
Lock:	All unlocked channels will be placed first in the list.
Default:	Sorting by searched order (from lowest to highest frequency or by LCN numbering).

7.1.1.6 Delete channels from FAV list

Select your favourite list in the *TV Channel list*. Press the ◀▶ buttons to switch to the FAV group, press the **RED** button to display sort options.

Delete

Press the **BLUE** button to enable the *Delete* function. The *Delete* sign moves up to indicate that *Delete* is selected. Use ▲▼ to highlight the channel you want to delete and press **OK** to mark it for deletion. The receiver asks you to enter the pin code. When you have marked all channels you want to delete, press **EXIT** twice. A confirmation banner pops up. Select *Yes* to delete the marked channels or *No* to cancel.

7.1.2 Radio Channel List

Basically, the operation of the *Radio Channel List* is the same as of the TV Channel List. The only difference is that in the *Radio Channel List* there is no video information, so it will always display the radio logo on the right preview screen.

7.1.3 Delete all

Use this menu to delete all stored channels. Select *Delete All* with ▲▼ and press **OK**. The receiver asks you to enter the pin code. **(Default pin: 1234)**. In the confirmation window select *Yes* with ◀▶ and press **OK** to delete or select *No* to cancel.

WARNING: The Delete all function will permanently delete all current channels and all favourite lists from your receiver, and you cannot leave the menu until you search for channels again.

7.2 Installation

7.2.1 Auto Scan

Use ▲▼ to select *Installation* and press **OK** or ▶ to advance.
Select *Auto Scan* with ▲▼ and press **OK** to enter.
Use ◀▶ to toggle between *FTA Only Yes* and *No*. When *FTA Only* is set to *Yes*, scrambled channels won't be stored in the channel list. Use ▲▼ to highlight *Search*. Now press **OK** to start auto scan. The receiver will store all newly found channels in the channel list.

7.2.2 Channel Scan

Use ▲▼ to select *Installation*, press **OK** or ▶ to advance.
Use ▲▼ to select *Channel Scan* and press **OK** to enter.
Use ◀▶ to toggle between available scan modes: *By Channel* and *By Frequency*.
If *By Channel* is selected, use the cursor buttons to select *Scan Band* and *Channel No*. If *By Frequency* is selected, use the cursor buttons to select *Frequency* and *Bandwidth*. Highlight *Search* and press **OK** to start scanning. Newly found channels will be stored in the channel list.

7.2.3 Aerial Adjustment

Use ▲▼ to select *Installation*, press **OK** or ▶ to advance.
Use ▲▼ to select *Aerial Adjustment* and press **OK** to enter.
Use ▲▼ move the highlight to the setting you wish to alter and use ◀▶ to change values.
The following settings are available:

Antenna Power:	Set to *On* if you use an active antenna. When set to *On*, 5 V will be present on the ANT IN connector of the receiver. Select *Off* for passive antennas.
Beeper:	Select *On* for an audible indication of signal reception. *Off* turns the beeper off.
Channel No.:	Select a channel that is known to carry broadcast in your region. The *Signal Strength* and *Signal Quality* bars give a visual indication of the reception. Adjust your antenna to obtain maximum signal strength and quality.

Press **EXIT** to leave the *Aerial Adjustment* screen.

7.2.4 LCN (Logical Channel Numbering)

If *LCN* (Logical Channel Numbering) is activated and an LCN signal is provided by the operator, channels will be stored in an operator defined order. Set *LCN* to *On* to activate operator defined channel numbering or *Off* to store channels in found order.

7.3 System Setup

This menu allows you to manage the system settings of your receiver. It consists of the following sub-menus: *Language*, *TV System*, *Local Time Setting*, *Timer Setting*, *Conax Conditional Access*, *Parental Lock*, *OSD Setting*, *Favourite* and *Auto Standby*.
Press ▲▼ to highlight a menu and press **OK** advance to the next screen. Use ▲▼ to move the highlight to a setting. Values can be changed with ◀▶. Press **EXIT** to leave.

7.3.1 Language

This menu allows you to set up your language preferences.

Language: Use ◀▶ to select language for the On Screen Display.

First Audio: Use ◀▶ to select audio language.

Second Audio: Use ◀▶ to select a language that will be played when the language selected in *First Audio* isn't available.

Subtitle Language: Use ◀▶ to select subtitle language.

Subtitle: Use ◀▶ to select subtitle type to be displayed automatically. The options are *Normal*, *Hard of Hearing* and *Off*

Teletext: Use ◀▶ to select teletext language (when available.)

7.3.2 TV System

Use this menu to match your receiver to your TV set. The following settings are available:

Video Resolution: Toggles between *576i up to 1080p*. Please use a setting that matches your TV's specifications. After a selection has been made, you will be asked to confirm. Note: Selection is only applicable on HDMI. You will be asked to confirm the new setting. If not confirmed within 15 seconds, the resolution will fall back to the previous state.

Aspect Mode: Use this option to select the aspect ratio of your TV and the preferred conversion method. The options are: *Auto* (automatic detection of aspect ratio), *4:3 Panscan* (Displays 16:9 widescreen broadcasts full screen on your 4:3 TV), *4:3 letterbox* (black bars on top and under the picture on a 4:3 TV) and *16:9* (use this setting for 16:9 TV sets).

Connection: Use this option to select the connection to your TV set. Select *HDMI* or *TV SCART*.

Digital Audio Output: Toggles between *PCM* and *Bitstream* output. When *PCM* is selected, all audio will be converted to stereo audio. *Bitstream* enables multi-channel audio on the digital output for use with a home theatre set.

7.3.3 Local Time Setting

Here you can set up your region and time zone.

Region: Use ◀▶ to select the region you live in.

GMT Usage: Set to *On* for broadcaster defined time or to *Off* to input time and date manually.

GMT Offset: Allows you to adjust the time zone you live in. This option is only available when *GMT Usage* is set to *On*. The *GMT Offset* range is "-11:30 ~ +12:00", increasing by half hours progressively. Some cities matching the set *GMT Offset* are displayed at the bottom of the screen.

Summer Time: Select *Off* or *On* to add one hour extra for summer time during the summer.

Date: *Date* and *Time* settings are available only when *GMT Usage* is set to *Off*. Use the **0~9** buttons to enter the date. Press **EXIT** to proceed.

Time: *Date* and *Time* settings are available only when *GMT Usage* is set to *Off*. Use the **0~9** buttons to enter the time. Press **EXIT** to proceed.

Time Display Setting to *On*, the time will be displayed constantly on screen.

7.3.4 Timer Setting

This menu allows you to set up to 8 timed events for recording or waking up the receiver.
Use ▲▼ to select *Timer Setting* from the *System Setup* menu and press **OK** to enter.
The receiver will display a list with 8 timers, followed by their respective status. Select the timer you want to set or change with ▲▼ and press **OK** to proceed.
The timer setup menu will now be displayed.
The following settings are available:

Timer Mode: Choose between *Off* (timer inactive), *Once, Daily, Weekly*.
(Daily means, the timer will be executed every day, Weekly means, the timer will be executed the same day, every week).

Timer Service: Choose between *Channel* (the timer will wake up the receiver) or *Record* (the timer will start recording the scheduled event).

Wakeup Channel: Use ◀▶ to select the channel the timer should wake up with.

Wakeup Date: Use the **0~9** buttons to enter the date for the timed event.

Wakeup Time: Use the **0~9** buttons to enter the start time.

Duration: Use the **0~9** buttons to enter the timer duration.

When all settings have been made according to your wishes, use ▲▼ to move the highlight to *Save* and press **OK** to confirm. To quit the timer without saving your settings, move the highlight to *Cancel*.

*Please connect a USB storage device with sufficient free space before you start a timed recording.

7.3.5 Conax Conditional Access

Conax Conditional Access: Select the *Conax Conditional Access* menu with the ▲▼ buttons and press **OK** to open it. In this menu you can access smartcard information and by using the Conax smartcard provided by your operator, you can access scrambled channels. You can select the following options which are related to your smartcard: *Subscription status, Event Status, Token Status, change CA PIN, Maturity Rating* and *About Conax CA*.

Subscription Status: Provides information about the current subscription status and entitlements

Event Status: Provides information about the current event status.

Tokens Status: Provides information about the current token status.

Change CA PIN: The following options available in this menu: *Change PIN Please Enter CA PIN*, *Please enter new CA PIN*, *Please confirm new CA PIN*. You can change the default smartcard pin code which was provided by the operator. (If you do not know the pin code, please contact the operator helpdesk.) Enter the provider PIN first, then use the ▲▼ buttons to select the "Change CA PIN" and press **OK** to open. Confirm the new PIN. A notification message appears about the successfully change, or about the missed/incorrect code.

Maturity Rating: You can restrict access for scrambled channels by the Conax system provided age settings (if the operator activates and broadcasts it in their system) in order to avoid your child accessing unwanted programmes. If the maturity rating is set and active on the selected scrambled channel, the receiver blocks the decoding and will request the CA PIN code for the decoding. Use the ▲▼ buttons to select the *Maturity Rating* option, then press the **OK** button to open it. The following options available in this menu: *Current card level* and *Enter CA PIN to modify*.

Current card level: The CA level which is currently set on the smartcard. The following levels available in the Conax system: *G-General Audience*, *PG – Parental Guidance*, *A – Over 18 and X-Erotic*. Use the ▲▼ buttons to select the *Current card level* option and then use the ◀▶ buttons to change the value. Then press the **OK** button. The cursor will jump to the *Enter CA PIN to modify* option. In order to process the maturity rating change, you need to type the CA PIN code.

Enter CA PIN to modify: Enter the current CA PIN code with the numeric buttons.

About Conax CA: This menu provides information about the Conax system and the smartcard.

7.3.6 Parental Lock

This menu allows you to protect the installation menu and/or channels with a password. You can also enter a new password in the *Parental Lock* menu.

Use ▲▼ to select *Parental Lock* from the *System Setup* menu and press **OK** to proceed. You will be asked to enter your pin code. **(DEFAULT: 1234)**

Menu Lock: Locks the installation menu. You can set *Menu Lock* to *On* or *Off*.

Channel Lock: Choose between: *Off*, *AGE 4*, *AGE 5*, up to *AGE 18*. Channels with a parental rating above the chosen age will be protected with a password (if available in your local broadcast.)

New Password: Enter your new password (4 digits) here.

Confirm Password: Re-enter your password here to confirm.

7.3.7 OSD Setting

This menu allows you to change settings for: *OSD Timeout* and *OSD Transparency*.

OSD timeout: Sets the time after which on screen banners and messages disappear. The range is *1~10* seconds.

OSD Transparency: To set the OSD transparency from *Off ~ 40%* with 10% steps.

Load Default OSD Setting:
Press **OK** to clear all OSD settings and reset to default values.

7.3.8 Favourite

This menu allows you to personalize the names of the 8 available favourite lists.

Use ▲▼ to select *Favourite* from the System Setup menu and press **OK** to proceed. The names of all groups are now displayed. Select a favourite group with ▲▼ and press **OK** to edit its name. A text field pops up to the right of the screen. Use ◀▶ ▲▼ to select characters and enter them with **OK**. When you have finished editing, press **BLUE** to save the changes. When all changes have been made, press **EXIT** twice.

7.3.9 Auto Standby

Auto Standby is a new feature that helps you reduce power consumption. When set to *On*, the receiver will turn to standby if it doesn't receive any commands for three hours. Set *Auto Standby* to *Off* to avoid the automatic switch down.

7.4 Tools

Press **MENU** in viewing mode to enter the *Main Menu*.
Select the *Tools* submenu with ▲▼ and press **OK** or ▶ to enter.
Use ▲▼ to highlight a submenu and press **OK** to proceed.
Press **EXIT** to leave.

7.4.1 Information

This submenu shows receiver specific information such as the hardware version and the software version. It also displays our web address www.strong.tv. Please have the *Information* screen on hand when calling our hotline. The person who answers your call might ask for the information given in this screen.

7.4.2 Load Factory Setting

This option allows you to reset the receiver to the factory settings, which clears all stored channels.

WARNING: By resetting your receiver to factory default, all your settings and stored channels will be permanently deleted. Please only use this option if the receiver suddenly should work in an unexpected way.

Use ▲▼ to select *"Load Factory Setting"* in the *Tools* menu and press **OK**. You are asked to enter your password.
Enter the correct password with the **0–9 buttons** (default: 1234). A confirmation window is displayed.
Select *Yes* to return to the factory settings. Select *No* to cancel.
Press **EXIT** to leave.

7.4.3 S/W Upgrade by OTA

This receiver is equipped with an Automatic Over The Air software upgrade function. When the receiver is switched to standby mode, "SrCH" is displayed on the front panel. The receiver automatically checks new software. If the receiver detects new software, the user will be notified about the new software availability at the next power on. Use the ◀▶ buttons to select *Yes* to process the software update, or select *No* and press the **OK** button to cancel and proceed to the normal operation mode. If new software is not available, the receiver switches to standby and displays the current time.

7.4.4 Upgrade by USB

This feature allows you to upgrade receiver software via the USB port. If new software is available for your receiver, it can be downloaded from our website www.strong.tv.
Place the software file (unzipped) in the root directory of your USB storage device (HDD, memory stick etc.) and insert this device into the USB port of the receiver.
Select *Upgrade by USB* from the *Tools* menu and press **OK** to proceed.
The upgrade menu will now be displayed.
Use ▲▼ to select *Upgrade Mode* and choose option *Allcode*.
Use ▲▼ to select *Upgrade File* and choose the file containing the new software.
When all settings have been made, move the highlight to *Start* and press **OK** to start the upgrade process.
After a few seconds, the receiver asks: "Are you sure to burn flash?". Select *Yes* to finalize the upgrade or *No* to quit without upgrading.

WARNING: After an update the receiver restarts automatically. During the upgrade process NEVER disconnect the receiver from the mains or switch off the power! Doing so might damage your receiver and will void warranty!

7.4.5 Remove USB device safely

Select *Remove USB device safely* from the tools menu and press **OK**. The receiver will display a message indicating that you can safely remove your storage device from the receiver. This can only be done if the receiver is not recording or is not in timeshift mode.

NOTE: After performing this action, the USB device is no longer accessible from your receiver. To gain access to your storage device again, re-insert it or switch the receiver to standby and on again.

7.5 Games

Your receiver is equipped with two games which can be played on your TV screen using the receiver remote control.
Use ▲▼ to select *Game* from the main menu and press **OK** or ▶ to proceed.
Select one of the available games (*Othello* or *Sudoku*) with ▲▼ and press **OK** to start the game.
Follow the directions on screen.
Use **EXIT** to quit a game.

7.6 Media+

The *Media+* menu consists of the following submenus: *Media Player*, *Record Manager*, *DVR HDD Information*, *HDD Format* and *DVR Configuration*
Use ▲▼ to highlight a menu and press **OK** to enter.
Press **EXIT** to quit.

7.6.1 Media Player

This function allows you to play MPEG, AVI, MP3, JPG and many other type files from a connected storage device (see details in the technical part).
Select *Media Player* from the *Media+* menu and press **OK** to proceed.
Use ▲▼ to browse the connected USB device and use **OK** to open folders. Press **OK** to play the highlighted selection.
The help banner at the bottom of the screen explains all buttons used in the Media player. Press **EXIT** to quit.

NOTE: You can also access the Media Player from viewing mode with the **FILE** key on the remote control.

7.6.2 Record Manager

The Record Manager gives you access to previously recorded events.
Select *Record Manager* from the *Media+* menu and press **OK** to enter.
Use ▲▼ to highlight the recording you wish to play and press **OK** start playback.
Press **EXIT** to exit.
During playback it is possible to perform the following actions:

YELLOW	To pause the playback.
BLUE	To resume (normal) playback.
◀◀/▶▶	For fast forward or fast rewind during playback. Press repeatedly for different speeds.
RED	Press to stop a playback and return to the Record Manager.
GREEN	Slow motion, press repeatedly for different speeds.

When the timer banner is on screen (activated by pressing **BLUE** or **INFO**), the following actions are possible:
Press ◀▶ and **OK** to jump forwards and backwards in time during playback.
1 = Set the marker point in playback, press again to delete the marker point.
2 = Jump to the next marker point.
3 = Jump forwards in time. (See details in **7.6.5** *DVR Configuration* under *Steps to:*.)

NOTE: You can also access the Record Manager from viewing mode with the **RED** key on the remote control. The help banner at the bottom of the screen explains all buttons used to edit in this Record Manager. Press **EXIT** to save the settings and quit the menu.

7.6.3 DVR HDD Information

This option shows relevant information about the connected USB device.
Select *DVR HDD Information* from the *Media+* menu and press **OK** to enter.
Press **EXIT** to leave.

7.6.4 HDD Format

The *HDD format* menu allows you to format the connected USB device.

WARNING: Formatting will permanently delete ALL data stored on the connected device. Please make a backup copy of all data you wish to keep before entering the *HDD Format* menu. STRONG cannot be held responsible for loss of data from USB devices used with this receiver.

Select *HDD Format* from the *Media+* menu and press **OK** to enter. Use ◀▶ to select the partition you wish to format (Partition 1 is set per default) and press ▼ to highlight *Format*. Press **OK** to proceed, select *Yes* or *No*, then *OK* or press **EXIT** to leave without formatting.

NOTE: It is possible to use already NTFS formatted USB disks.

7.6.5 DVR Configuration

This menu allows you to make settings for Timeshift, recording and playback.
Select *DVR Configuration* from the *Media+* menu and press **OK** to enter.
Use ▲▼ to move the highlight and ◀▶ to change settings.
Press **EXIT** to quit.

Timeshift:	*On* or *Off*. When *Time Shift* is set to *Off*, Time Shift becomes inactive.
Timeshift to Record:	*On* or *Off*. When set to *On*, Timeshift is also possible during recording.
Record Selection	Select the partition whereto the receiver should record.
Standby after record:	*On* or *Off*. Select if receiver should go into standby mode after a timer recording.
Step to:	*30 sec* to *10 min*. Set the time step you like to jump forward to with the button **3** during playback of recorded files.
NOTE:	Please use a well-known brand USB 2.0 USB HDD for recording and Timeshift. Some USB devices may not be usable due to their quality.

8.0 TROUBLESHOOTING

There may be various reasons for abnormal operation of the receiver. Check the receiver according to the procedures shown below. If the receiver does not work properly after checking it, please contact your dealer or the local Service Hotline. Do NOT try to open or disassemble the receiver. It may cause a dangerous situation and warranty will be void.

Problem	Possible cause	What to do
LED indicator not lit	Mains lead unplugged Mains fuse blown	Check mains plug Check fuse
No signal found	Aerial is disconnected Aerial is damaged/misaligned Out of digital signal area	Check aerial lead Check aerial Check with dealer Switch receiver's Antenna Power ON or connect external power for active antennas
No picture or sound on TV	HDMI is not selected on your TV or Amplifier or is set to higher resolution as TV supports TV is not switched on	Switch to correct TV input Select lower resolution on receiver Switch TV on
Scrambled channel Message	Channel is scrambled	Select alternative channel Insert provider smartcard. Insert smartcard with chip side down
No response to remote control	Receiver off Remote not aimed correctly Front panel obstructed Remote batteries exhausted	Plug in and turn on plug Aim remote at front panel Check for obstructions Replace remote batteries

Problem	Possible cause	What to do
Forgotten channel lock code		Re-install channels to cancel channel lock Default PIN is 1234 Contact local Service Hotline or send email to our Support via www.strong.tv
Forgotten PIN code		Contact local Service Hotline or send email to our Support via www.strong.tv
After moving the receiver to another room/area you are no longer able to receive digital reception	Antenna signals are too weak	Press the **INFO** button on remote 3x to call up signal bars and adjust antenna for (maximum) reception or rescan channels

9.0 TECHNICAL SPECIFICATIONS

Demodulator

Demodulator:	DVB-T COFDM, 16 QAM/64 QAM
Frequency range:	174 – 230 MHz (VHF) 470 – 862 MHz (UHF)
Channel bandwidth:	6/7/8 MHz switchable bandwidth

Video Decoder

Profile level:	ISO13818-2 (MPEG-2) – MP@HL ISO14496-10 AVC/H.264 HP@L4.1 MPEG-4 ASP
Video resolution:	576i25 (SD), 576p50 (SD), 720p50 (HD), 1080i25 (HD),1080p50 (HD)
Aspect ratio:	4:3 Letterbox, 4:3 Pan & Scan, 16:9, Auto

Audio Decoder

Audio Decoding:	ISO 11172-3 / ISO 13818-3 (MPEG) ISO14496-3 MPEG-4 AAC – LC/HE Dolby Digital, Dolby Digital+, 2.0, 5.1*
Audio Mode	Mono, Dual Channel, Stereo PCM and Bitstream on S/PDIF

*Dolby and the double-D symbol are registered trademarks of Dolby Laboratories
*Decoding system for Conditional Access and smartcard reader: Conax

Memory and system

Flash memory:	2 Mbytes
System memory:	64 Mbytes
Multimedia	
Video recording:	PS Format
Video playback:	MPEG-1 and MPEG-2 encoded (mpg), VOB, AVI, MKV, TS, MPEG-4 and MOV, DAT, Divx, Xvid**
Audio playback:	MP3, OGG
Picture view:	JPEG, JPG, BMP format

**STRONG cannot guarantee the playback of external video files, which have not been recorded by this device

Connectors

ANT IN:	IEC-type, female
TO TV:	IEC-type, male (loop-through)
HDMI 1.3 with HDCP copy protection	
TV SCART (RGB, CVBS, Audio L/R output with volume control)	
S/PDIF:	coaxial digital audio output
3 RCA (Audio L&R and Video CVBS)	
USB 2.0 port, 5 V/800 mA (max.) supported	

General data

Supply voltage:	220 – 240 V AC (SMPS), 50/60 Hz
Power consumption:	max 14 W, typ. 5,84 W
Power consumption in standby:	0,97 W
Operating temperature:	+0 to +40 °C
Storage temperature:	-10 to +70 °C
Operating humidity range:	25 ~ 75% RH, non-condensing
Size (W x D x H) in mm:	235 x 135 x 43 mm
Weight:	0,57 kg